## IMPROVEMENT OF GOWANUS CREEK CHANNEL, N. Y.

July 3 (legislative day, June 27), 1952.—Ordered to be printed

Mr. Chavez, from the Committee on Public Works, submitted the following

## REPORT

[To accompany H. R. 7855]

The Committee on Public Works, to whom was referred the bill (H. R. 7855) for improvement of Gowanus Creek Channel, N. Y., having considered the same, report favorably thereon without amendment and recommend that the bill do pass.

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A review report on Gowanus Creek Channel, N. Y., with a view to determining the advisability of modifying the existing project, was authorized by a resolution of the Committee on Rivers and Harbors of the House of Representatives adopted March 19, 1946. The report has been transmitted to Congress and published as House Document No. 318, Eighty-second Congress, second session.

Gowanus Creek is a tidal waterway on the east side of Upper New York Bay, in the Borough of Brooklyn, about 4 miles by water southeast of the Battery, New York City. It extends 1.8 miles northeasterly from the north end of Bay Ridge Channel in Gowanus Bay and includes the 1-mile upper portion known as Gowanus Canal, which local interests have improved to depths ranging from 12 feet at the lower end to 7 feet at the head. The lower part of Gowanus Creek has been improved by the United States under a project known as Gowanus Creek Channel. The locally dredged Henry Street Basin enters Gowanus Creek Channel from the north, 750 feet upstream from the lower end of the Federal project. This basin, about 2,000 feet long and 200 feet wide, has depths decreasing from 21 feet in a strip 100 feet wide in the lower 1,000 feet of the basin to 5 feet at the head.

Local interests have expended approximately \$6,000,000 in developing water-front terminals and berthing facilities in the section of Gowanus Creek under consideration. Insufficient depth in the 26-foot section of the waterway precludes efficient operation of the larger deep-draft vessels and, during high tide, congestion is aggravated with the concentration of deep-draft vessels taking advantage of the addi-

tional depth of water. Depths in the Henry Street Basin are insufficient to accommodate the cargo ships and tankers that use, or expect to

use, the basin.

The proposed plan of improvement, which this bill authorizes, and which local interests claim would produce annual benefits estimated at \$525,000, provides for deepening the existing 26-foot project of Gowanus Creek Channel to 30 feet at mean low water, including extension of the deepened channel about 500 feet into the 18-foot project, and widening of the channel at the junction with the existing 40-foot project of Bay Ridge and Red Hook Channels, and for a branch channel 30 feet deep and 150 feet wide in the lower 1,000 feet of Henry Street Basin.

The estimated cost is \$428,000, of which \$287,000 is Federal, consisting of \$227,000 for enlarging the main channel and \$60,000 for dredging the channel in Henry Street Basin; and \$141,000 is non-Federal, consisting of \$116,000 and \$25,000 for deepening the approaches and berths along the Gowanus Creek and Henry Street Basin channels, respectively. The Federal annual cost of maintenance is estimated at \$1,500.

Representatives of the Corps of Engineers advise that the improvement would relieve congestion on the waterway by spreading the traffic of deep-draft vessels throughout the day instead of only during the hours of high tide, and would eliminate the hazards of grounding.

The recommended project has an indicated benefit-cost ratio of 2.65 for Gowanus Creek channel, 1.22 for the channel in Henry Street Basin, and 2.28 for the total improvement.

The committee believes that further improvement of the project, as recommended by the Engineers, is justified since two large ship-yards on the Gowanus Creek 26-foot channel are engaged in the repair of all types of vessels from any ports, including the latest type of oceangoing tankers and cargo vessels, and the project thus contributes materially to national-defense requirements. In view of this, the committee is of the opinion that this is a meritorious project.

The report of the Board of Engineers for Rivers and Harbors is set forth below:

REPORT OF THE BOARD OF ENGINEERS FOR RIVERS AND HARBORS

DEPARTMENT OF THE ARMY,
BOARD OF ENGINEERS FOR RIVERS AND HARBORS,
Washington, D. C., June 20, 1950.

Subject: Gowanus Creek Channel, N. Y. To: The Chief of Engineers, United States Army.

1. This report is submitted in response to the following resolution adopted 19 March 1946:

"Resolved by the Committee on Rivers and Harbors of the House of Representatives, United States, That the Board of Engineers for Rivers and Harbors be, and is hereby, requested to review the reports heretofore submitted on Gowanus Creek Channel, N. Y., with a view to determining if it is advisable to modify the existing project in any way at this time."

2. Gowanus Creek is a tidal waterway on the east side of Upper New York Bay, in the Borough of Brooklyn, about 4 miles by water southeast of the Battery, New York City. It extends 1.8 miles northeasterly from the north end of Bay Ridge channel in Gowanus Bay and includes the 1-mile upper portion known as Gowanus Canal, which local interests have improved to depths ranging from 12 feet at the lower end to 7 feet at the head. The lower part of Gowanus Creek has been improved by the United States under a project known as Gowanus Creek channel. The locally dredged Henry Street Basin enters Gowanus Creek channel

from the north, 750 feet upstream from the lower end of the Federal project. This basin, about 2,000 feet long and 200 feet wide, has depths decreasing from 21 feet in a strip 100 feet wide in the lower 1,000 feet of the basin to 5 feet at the head. The mean range of tide in Gowanus Creek channel is 4.7 feet. The improvement authorized by Congress provides for a channel 26 feet deep at mean low water from Bay Ridge channel at Twenty-eighth Street to the foot of Percival Street, with the width decreasing from 300 feet at Twenty-eighth Street to 200 feet at Percival Street, and thence 18 feet deep at mean low water to the Hamilton Avenue Bridge, gradually decreasing in width to 100 feet at the bridge. project was completed in 1904. The cost to June 30, 1949, was \$140,122, of which \$70,000 was for new work and \$70,122 was for maintenance. The latest approved estimate of annual cost of maintenance is \$6,000. Local interests have expended approximately \$6,000,000 in developing water-front terminals and berthing facilities in the section of Gowanus Creek under consideration. Insufficient depth in the 26-foot section of the waterway precludes efficient operation of the larger deepdraft vessels and, during high tide, congestion is aggravated with the concentration of deep-draft vessels taking advantage of the additional depth of water. Depths in the Henry Street Basin are insufficient to accommodate the cargo ships

and tankers that use, or expect to use, the basin.

3. The tributary area includes the Boroughs of Brooklyn, Queens, Manhattan, and Bronx, of the city of New York, with a combined population of 7,965,000 in 1949, and to some extent parts of Nassau and Suffolk Counties. The area in the immediate vicinity of Gowanus Creek channel has excellent transportation facilities. ties. Commodities are distributed locally by truck, from the water terminals, over a network of highways and bridges to points in New York City and Long Island. Two large shipyards on the Gowanus Creek 26-foot channel are engaged in the repair of all types of vessels from many ports, including the latest type of oceangoing tankers and cargo vessels. Commerce of Gowanus Creek, channel and canal, including Henry Street Basin, for the 25-year period to and including 1947, averaged about 4,000,000 tons annually with a minimum of about 3,000,000 tons in 1923 and a maximum of about 5,000,000 tons in 1930, excluding tonnages of the section below Twenty-eighth Street. During the period 1924 to 1941, the average annual commerce consisted of 2,500,000 tons transported to and from Gowanus Canal and 1,500,000 tons handled in the section below the head of the 18-foot channel. During the years prior to the late war, the commerce consisted of petroleum products, coal, grain, ores, sugar, cocoa beans, and general cargo. In addition, car ferry traffic handled in the 26-foot section during the period 1924 In addition, car ferry traffic handled in the 26-foot section during the period 1924 to 1947 averaged 97,400 tons annually. During 1946 and 1947, vessels drawing 26 feet or more made 208 trips in Gowanus Creek channel, including 36 trips by vessels with drafts between 28 and 30 feet and 29 trips by vessels with drafts between 30 and 32 feet. During 1947, vessel traffic in Henry Street Basin included nine out-bound trips of steamers drawing from 28 to 30 feet. During 1948, the two shipyards repaired 917 vessels consisting of 240 cargo ships, 29 tankers, and 648 harbor craft and oceangoing tugs. Commerce carried in deep-draft vessels over the waterway during the year 1948, exclusive of that of Gowanus Canal is estimated at 1,227,400 tons for the 26-foot channel including 79,700 tons for estimated at 1,227,400 tons for the 26-foot channel including 79,700 tons for Henry Street Basin. Prospective annual commerce to be carried in deep-draft vessels is estimated at 1,317,000 tons which includes for the Henry Street Basin 68,000 tons of grain, 12,000 tons of general cargo, and 90,000 tons of lumber.

4. Local interests desire deepening of the existing 26-foot and 18-foot channels in Gowanus Creek to 30 feet to a line opposite the upper end of the Colonial Sand & Stone Corp. bulkhead; and dredging of a branch channel in Henry Street Basin, 30 feet deep and 100 feet wide for a distance of 1,000 feet, thence 15 feet deep and 100 feet wide to the head of the basin. They claim that the improvement would produce annual benefits estimated at \$525,000, consisting of \$100,000 from the elimination of delays in waiting for tides, \$50,000 from elimination of additional costs in shipment of grain resulting from moving of partially loaded deep-draft vessels to other terminals to permit leading to appear and \$275,000 from elimination. vessels to other terminals to permit loading to capacity, and \$375,000 from elimination of lighterage costs on general cargo received along the present 18-foot channel. Several commercial interests state that they would dredge their slips and strengthen their bulkheads if required because of the greater depth in the

No other offer of local cooperation is made.

5. The district engineer finds that the most suitable plan of improvement provides for deepening the existing 26-foot project of Gowanus Creek channel to 30 feet at mean low water, including extension of the deepened channel about 500 feet into the 18-foot project, and widening of the channel at the junction with the existing 40-foot project of Bay Ridge and Red Hook channels; and for a

branch channel 30 feet deep and 150 feet wide in the lower 1,000 feet of Henry Street Basin. He states that existing depths in the upper part of Henry Street Basin are adequate for the type of vessels using that part of the basin. The cost is estimated at \$428,000 of which \$287,000 is Federal, consisting of \$227,000 for enlarging the main channel and \$60,000 for dredging the channel in Henry Street enlarging the main channel and \$60,000 for dredging the channel in Henry Street Basin; and \$141,000 is non-Federal, consisting of \$116,000 and \$25,000 for deepening the approaches and berths along the Gowanus Creek and Henry Street Basin channels, respectively. The Federal annual cost of maintenance is estimated at \$1,500 in addition to that now required, all for the channel in Henry Street Basin. The annual carrying charge is estimated at \$18,670 of which \$13,770 is for Gowanus Creek channel and \$4,900 is for the channel in Henry Street Basin. The district engineer states that the improvement would relieve congestion on the waterway by spreading the traffic of deep-draft vessels throughout the day instead of only during the hours of high tide, and would eliminate the hazards of instead of only during the hours of high tide, and would eliminate the hazards of grounding. It would also facilitate access to the new grain pier of the Port of grounding. It would also facilitate access to the new grain pier of the Port of New York Authority and another pier along the Henry Street Basin. Based on present commerce carried in deep-draft vessels, the annual savings from eliminafor the channel in Henry Street Basin. The indicated benefit-cost ratio is 2.65 for Gowanus Creek channel, 1.22 for the channel in Henry Street Basin, and 2.28 for the total improvement. He concludes that the further improvement of the project is justified and therefore recommends it subject to the conditions that local interests provide without cost to the United States all lands, easements, and rights-of-way for the construction and maintenance of the project, when and as required; deepen the approaches and berths at the ship terminals in order to secure the full advantages of the deeper channels; and hold and save the United States free from claims for damages as a result of the improvement. The division project is justified and therefore recommends it subject to the conditions that engineer concurs.

6. Local interests were informed of the recommendations of the reporting officers and invited to present additional information to the Board. Careful

consideration has been given the communications received.

## VIEWS AND RECOMMENDATIONS OF THE BOARD OF ENGINEERS FOR RIVERS AND HARBORS

7. The Board of Engineers for Rivers and Harbors concurs generally in the views and recommendations of the reporting officers. The improvement would relieve congestion in the Gowanus Creek Channel and provide suitably for the needs of deep-draft navigation both in that waterway and in the Henry Street Basin. The anticipated benefits are considered sufficient to justify the expendi-

ture required for the work.

8. Accordingly, the Board recommends modification of the existing project for Gowanus Creek Channel, N. Y., to provide for deepening the existing 26-foot channel to 30 feet at mean low water, including extension of the deepened channel chanter 500 feet into the existing 18 feet channel and widening of the channel extension of the channel extens about 500 feet into the existing 18-foot channel and widening of the channel at the junction with the existing 40-foot project of Bay Ridge and Red Hook Chantel at the junction with the existing 40-foot project of Bay Ridge and Red Hook Chantel at the junction with the existing 40-foot project of Bay Ridge and Red Hook Chantel at the junction with the existing 40-foot project of Bay Ridge and Red Hook Chantel at the junction with the existing 40-foot project of Bay Ridge and Red Hook Chantel at the junction with the existing 40-foot project of Bay Ridge and Red Hook Chantel at the junction with the existing 40-foot project of Bay Ridge and Red Hook Chantel at the junction with the existing 40-foot project of Bay Ridge and Red Hook Chantel at the junction with the existing 40-foot project of Bay Ridge and Red Hook Chantel at the junction with the existing 40-foot project of Bay Ridge and Red Hook Chantel at the junction with the existing 40-foot project of Bay Ridge and Red Hook Chantel at the junction with the existing 40-foot project of Bay Ridge and Red Hook Chantel at the junction with the existing 40-foot project of Bay Ridge and Red Hook Chantel at the junction with the existing 40-foot project of Bay Ridge and Red Hook Chantel at the junction with the existing 40-foot project of Bay Ridge and Red Hook Chantel at the junction with the project of Bay Ridge and Red Hook Chantel at the junction with the project of Bay Ridge and Red Hook Chantel at the junction with the project of Bay Ridge and Red Hook Chantel at the project of Bay Ridge and Red Hook Chantel at the project of Bay Ridge and Red Hook Chantel at the project of Bay Ridge and Red Hook Chantel at the project of Bay Ridge and Red Hook Chantel at the project of Bay Ridge and Red Hook Chantel at the project of Bay Ridge and Red Hook Chantel at the project of Bay Ridge and Red Hook Chantel at the project of Bay Ridge and Red Hook Chantel at the project of Bay Ridge and Red Hook Chantel at the project of Bay Ridge and Red Hook Chantel at the project of nels, and for a branch channel 30 feet deep at mean low water and 150 feet wide in the lower 1,000 feet of Henry Street Basin, all generally in accordance with the plans of the district engineer and with such modifications thereof as in the discretion of the Chief of Engineers may be advisable, at an estimated cost to the United States of \$287,000 for construction and \$1,500 annually for maintenance in addition to that now required, subject to the condition that local interests give assurances satisfactory to the Secretary of the Army that they will: (a) Provide without cost to the United States all lands, easements, and rights-of-way for the construction and maintenance of the project, when and as required; (b) deepen the approaches and berths at the ship terminals in order to secure the full advantages of the deeper channels; and (c) hold and save the United States free from damages due to the construction works; and also subject to the condition that no dredging shall be done by the Federal Government within 50 feet of any wharf or structure unless a waiver of damage is signed by all parties having an interest in such wharf or structure or by the port authorities or other financially competent agency.

For the Board:

J. S. BRAGDON, Brigadier General, Chairman.

The Chief of Engineers concurs in the views and recommendations of the Board.